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LEADING ARTICLES

WHAT DOES DISEASE MEAN?

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DISEASE, like health, plays a related part in the economy of life. While there is a clearly outlined and well-defined distinction between them; nevertheless they are so interwoven and connected it is not possible for man to tell a shade of difference between health and disease, other than by a system of relation measured by the unit of his life, that equals the law of all the known physical economy of truth that exists in the universe at present. This is why disease exists in the world, because it can be measured by the same light of one soul of life. But there is a vast difference between the cause and effect of life. This is the difference between the image of God and man.

The one that comes before the physician for advice, almost invariably is confronted by the question: "How do you feel?" The answer gives up the clew that leads the way to make a diagnosis. The direction of our counsel equals the intelligence of the diagnosis. This ends up so variable, will eliminate it here; for this theme is purely confined to the law of general principles that pervade the whole system of the world's economy of truth measured by the conscious soul of feeling which becomes known in the unit of man's life as an effect.

This at once suggests the question: Is there a cause that creates this effect? To me at least this is certain. No man can tell a shade of difference between life, soul, conscience, feeling, truth, law or system; other than by relation. Take one away, then the whole crumbles into a heap of black ashes. There is not one thing in the world more absolutely certain it takes the wealth of all these resources to equal the one real and ideal immortal unit of life. Not to call this God, would mean I am a coward to deny this simple truth that endures throughout all eternity, in spite of the fact that all mankind "thinks" it "knows" the world is only dead matter and force.

In my experience, rheumatism is the most destructive of diseases. Indeed, I fearlessly say, a dose of syphilis is mild compared with an acute attack of articular rheumatism. Let us take rheumatism for our text as one of the most typical illustrations to portray what disease means.

Dr. S. Solis-Cohen most clearly stated the present state of our knowlege what rheumatism means when he said: "I am inclined to the view that there is a group of organisms, possibly cocci, any one of which under certain conditions may give rise to acute polyarthritis. I do not refer here to those organisms which we have in mind when we speak of gonorrheal arthritis, scarlatinal arthritis, diphtheritic arthritis, etc. These are specific microbes, giving rise incidentally, as it were, to specific forms of acute polyarthritis not properly to be termed rheumatism."

This brief journey down into the details of rheumatism at once opens up a vast realm of dark clouds that hover over everywhere in this biological conflict of diseases, and clearly illustrates that modern medicine has just sent its first rays above the horizon with no end of possibilities ahead that come up for solution without end. It will be some time before man learns the cause of rheumatism. This problem of rheumatism is formulated in a somewhat different way, but ultimately equals the same real idea expressed by Dr. Lewis A. Connor:

"1. That acute rheumatism is not caused by one organism, but is a particular reaction to various diseases.

2. That the disease is only an attenuated pyemia resulting from infection by the com-

mon pyogenic streptococci and staphylococci.

3. That the disease is due to a specific anerobic bacillus.

4. That it is due to a specific diplococcus or streptococcus.

5. That acute rheumatism is a specific infectious disease whose microbic cause has not yet been discovered."

Dr. P. H. Dunn says: "Those who regard rheumatic fever as a specific reaction of the tissues to a variety of infections may in time prove right, but at present they need further evidence to show that a variety of organisms of the streptococcus group can produce such a specific reaction."

I might quote more opinions along this line, including that of Achalme, but feel sure this equals the general knowledge of rheumatism, and alike ends up in the same medley of confusion.

In this biological conflict of living economy, we know that fever is the most accurate standard of measure, next to feeling, by which we can tell the conflict going on between the two factors of health and disease. An incipient cancer in the earliest hour of its being appears to be an exception. This story of disease is so wonderful, it is no wonder it eludes man's unfolding along the law of general principles. But just as truly as disease exists, will it finally be revealed with all known simplicity. Nevertheless, fever, no matter how acute or feeble is a general index of disease. When one comes before the physician with a rapid pulse and increased afternoon fever, we feel sure the tubercle bacillic invasion has fastened its hold so relentlessly, the prognosis ends up in the grave, because the infection has become mixed, just as surely as the sputa is yellow.

"Various definitions of the febrile process have been given, but not one is entirely satisfactory by reason of the incompleteness of our knowledge concerning the underlying mechanism. . . That fever and pyrexia are not one is generally recognized."

This idea is clearly illustrated by a case in my experience. A young man in the flush of youth had an extreme sunstroke won in the shade. He was in the throes of unconscious convulsions with a temperature of 106. To draw off this excessive pyrexia by rubbing him with ice appeared to me as the best means to restore his health. This was fully redeemed by the result. Some that witnessed this effort said I was a brute. Nevertheless I learned there is a clearly outlined distinction between pryexia and fever that follows the same law of biological economy.

When a beautiful child is carried away by diphtheria, looks like a cruel and horrible tragedy that sinks so deep into the agonized feeling of a mother's soul, she cries out: "God, why could you be guilty of all this" No more fervid, holy, or sacred a prayer ever appealed to Him for an answer. Religion gives an indirect and somewhat nebulous answer by saying: "It is God's wisdom that is for the best." There is a depth of philosophy hidden beneath these simple words, it will take mankind a long time to learn. This prayer has lately become answered in another way, because it appeals keenly to all alike. It inspired a large army of faithful and tireless workers supported by innumerable laboratories throughout the civilized world. The fruit of this is familiar to all, although it is no more than the first budding ray of light that penetrates above the horizon. This is the price of an idea. Why disease exists, is the keen stick of pain that drives man on in his work, work, work; so he may live nearer and come closer to the unit of all God's economical law of the truth in the kingdom of which there is no disease, also no ease from work. Indeed, even God has to work for a living, because He is limited to the conservative power of one soul, that it takes the whole universal means to express. If this was not true, then the world would not be, neither could man live as related part therein.

The man that says the world owes him a living, really means he is a lazy communistic social anarchist, that assumes the right to rob and plunder others of their honestly earned toil. Indeed, even hates a "copper," that, like every workingman lives from hand to mouth, with such an intensity which becomes familiar almost daily, it is not necessary to refer to the "Haymarket bomb." This has lately stuck up its ugly head with a venom so virulent, even shot down a priest while administering the holy sacrament. The chief of Chicago police has just been attacked by an anarchist. The army of anarchism is just about to take up this assassin's body buried with decency in the potter's field and place him among the friends that threw the Haymarket bomb and make him a martyr to the cause of anarchism. I am pleased to learn this is not resisted by the social authorities that exist; gives them free reign to express the violent product of their work as an object lesson that so horrified the world. I feel sure the more it is taught, the sooner will end up in the putrid night of annihilation.

Is there a duty more clear then that the general army of all honest men, more especially the daily toilers, to destroy and strangulate this lurid flag of anarchism with mercy and pity, as the most pestilential of known diseases. This is merely one of the special forms of preventative medicine.

"We fat all creatures else to fat us, and we fat ourselves for maggots. A man may fish with the worm that hath fed of aking, and eat of the fish that fed of this worm, and thus show how the body of a king may go a progress through the guts of a beggar."

This is an ideal parable of poetic speech in which every term can be figuratively accounted for with mathematical accuracy back into the ideal soul of Shakespeare's feeling at the time he penned these immortal words as an honest expression of his soul by which it alone was possible. "Believe me, Horatio, there is more philosophy in heaven and earth, than man ever dreamed of."

An apostle asked Jesus: "Why speaketh thou by parables?" His answer was something like this: God is so great a truth, it is the only means of speech to portray the ideal wealth of His soul by the light of man's soul out of which was created after the same image of life, alike limited by the one immortal light of soul or truth.

This is a parable of poetic speech in which every term can be accounted for from cause to effect, and effect back to cause by the light of one ideal soul. This is why Jesus looks like God. Why all mankind ends bankrupt in the sight of Jesus in proportion "knows" the world is merely dead matter and force. Jesus survives because he never lost his soul; an atom of dead truth had no play in his being.

This idea opens up a floodgate of possibilities that daily transpire before our eyes. I observed an ignorant hypnotist "cure" a case of "aphasia" of several years duration in a few minutes by "suggestion." This same hypnotist by "suggestion" put a girl to sleep while I cut out a painful neuroma from her hand. When the operation was completed, he snapped his fingers, and she came to." These facts are beyond dispute, must be recognized because they stare all honest men in the face. With these means of command we can readily understand why Jesus cured certain kinds of diseases; but then, more than now, became exaggerated by his personal light of general worth of influence so great, the only way the apostles could describe their feeling was by the speech of parables, until it finally ended up so extreme in relation had to resort to the poetic miracle of the resurrection to portray the ideal health of Jesus' soul. This is the most pure, real an ideal poem of speech that ever welled out of the soul of man. Hence will endure the crucial test of all the unborn ages. Indeed, will grow in volume as time rolls on. There is not one thing more absolutely certain, God is the immortal unit, and Jesus incomparably the most brilliant son of man, measured by the light of one soul.

The most simple truth in the world is life. Indeed, it equals the intelligent soul of conscious feeling measured by the unit of man's life to trace his way back to the cause of one life out of which was created. Why throbs, vibrates and pulsates every moment of time as a related part of the whole, until it equals the conservation of energy that is never more or less than the same unit of life from cause to effect, and effect traced back to cause, measured by the same powerful light of one soul to which both alike are limited. If the universe is not limited to the conservative power of God's soul of living truth, then man's soul of conscious feeling would not end up so clear an effect, in which it is not within the means of one to find a flaw in the world's system of a lawful economy that does not always and forever equal the eternal soul of powerful truth, the unit of which begins in God. This is so simple, I really wonder why all mankind has strayed away from it. If every term in this equation could not be accounted for with system, and each part play a relation to the whole! Then I would not dare cast it into the arena of thought: if I was not sure will sooner or later appeal to the organized soul of man's common sense.

"Roux and Yersin showed that a fatal result following the inoculation with the bacillus was not caused by any extension of the micro-organism within the body; and they were enabled in bouillon cultures to separate the bacilli from the poison. The toxin so separated killed with very much the same effects as those caused by the inoculation of the bacilli; the pseudo-membrane, however, is not formed. These results were confirmed by many observers." (Osler).

This idea was the source that caused the introduction of antitoxin that robbed diphtheria of its terrors. Only those that realize what diphtheria meant before antitoxin came upon the stage, can fully comprehend and understand the wealth of its worth. My late experience causes me to feel there are few mothers that really comprehend or understand what this means. Indeed, their former conception causes them to look with suspicion on the doctor's diagnosis by curing it with such ease and rapidity. To me this is not wonderful, for know it is the most wonderful truth that ever came within my experience. The one that has witnessed the battle of biological conflict that tranpsires and takes place in the red corpuscles of the blood during an acute attack of malarial fever, observe a truth so great, it staggers the wealth of his imagination so keen, it causes a

new stream of thought to enter his being so passingly wonderful, feels he is not near the shore of what disease means in the world's system of lawful economy.

Asiatic cholera is endemic to lower India. At times becomes epidemic and spreads over the entire temperate zone when the environment is favorable for its propagation. While crossing the Atlantic Ocean, in 1866, our ship with eight hundred passengers became infected with cholera. One hundred and eighty died. After forty-two days of quarantine in New York harbor, during which I had an attack, we were given a bill of health. I went directly to Chicago. In a short time an acute epidemic of cholera took place immediately around my home. One to three funerals occurred daily for a short time. Later, when I heard Dr. N. S. Davis describe the epidemic of cholera on the west side in 1866, it appealed to me so keenly, I could not help feel it is more than probable I was the immediate cause.

This experience is merely related to illustrate the difference of quarantine practiced then and now. Robert Koch discovered the comma bacillus in 1884. In 1892 there was quite a general epidemic of this disease throughout continental Europe. Seventeen thousand cases were recorded in the city of Hamburg alone. A ship with ten cases of well-defined cholera on board landed in New York harbor during the same year. It was strictly quarantined. A systematic examination of the stools of each was at once begun. When found free from the comma-bacillus, all their outer belongings were thoroughly sterilized, and then released. The result so equalled the practical product of this expected effect ventured by this board of health that had the courage of its conviction, there is not a blot upon its page, although it was an innovation of the first magnitude and an honor to American medical intelligence. This is also honor enough for Dr. Koch. While our nation may never understand or truly comprehend the service of his work, that the combined wealth of New York could not have prevented from becoming epidemic. It is also more than a guess that the World's Exposition held at Chicago in 1893, would have ended in a complete and disastrous failure.

In 1882, Dr. Robert Koch discovered the tubercle bacillus. The abstract of the twelfth census says: The mortality from consumption has decreased 54.9 per cent during the decade between 1890 and 1900. If this is true after the few years of teaching this simple truth, that tallies with my local experience, then is not this ideal fact of the tubercle bacillus introduced the greatest of all known remedies, the source of which can alone be traced back to Dr. Koch, in ratio not one has discovered a remedy greater than the isolation of prevention and hygiene.

In a local and small organized social community it beecomes somewhat easier to illustrate what this general biological conflict means, than in a large city, because nearer in touch with the whole, and can read its pulse with greater accuracy.

An epidemic of whooping cough came into our midst after some prolonged absence. It was not quarantined and given full sway. Like a prairie fire it swept in all directions, consumed everything combustible, and finally died out by starvation. Hence it was impossible to have another epidemic for some years. Measles followed the same course of periodicity, for alike allowed to pursue the same course. Scarlet fever, however, was strictly quarantined, and why it is always more or less with us, for there is a reserved storage of fuel to burn or react on.

After an absence of twenty-eight years smallpox came in our midst. An outlying local unvaccinated district was visited by smallpox. It was allowed to spread. Practically every family was invaded. In children the disease is milder than among adults. Every pregnant woman but one aborted. She was in the ninth month of pregnancy. This child appeared normal at birth, but on the eighth month of life died from an acute and extreme case of hydrocephalus.

The skin of man's body is the outer horny layer that protects him from all known infectious invasions. It is an impervious degenerative layer of epidermic living cell that have about completed their specialized function to warn us against flies and mosquitoes by the route of the nervous system that keeps us contantly busy to drive away. Screen doors prevent more diseases than man ever dreamed of, compared with which the comfort is a beggar in relation. These epidermic cells that are cast off daily without number become so impoverished not one specialized micrococcic cell can attack it. Why we must first abrade this outer layer to ooze out serum to vaccinate against smallpox.

The bacillus of diphtheria is a specialized life that always and invariably begins locally by making an attack on the most vulnerable cells like the tonsils, or an exposed wound, the cells of which have been robbed of a part of their inherent vitality. An example in my experience clearly illustrated this idea. I called on a surgeon to perform a mastoid operation. The next day his brother presented a well developed case of diphtheria. A day or two later a membrane appeared

in this wound and spread with great rapidity. I gave a dose of antitoxin. The reaction equalled that of his brother, but apparently with greater rapidity. You have no idea what a delightful pleasure it was to witness this recovery. It made me feel that life is worth living, and medicine the greatest of professions.

When the first moneric living cells came upon the stage of the world with all their simplicity of nakedness every term of which can be physically accounted for with a mathematical accuracy until it equals a chemical formula; nevertheless, were subject to the prolonged ages of time, the environment of which was passing through gradual changes, and had to gradually adjust their being in harmony to maintain their existence. In this prolonged journey, long before life attained the wealth of an ameba, it had become so differentiated with system of organized relation into the multiform and multiplex expressions of life, it laid the foundation of the endless variations of specialized forms of life. This is a simple fact. What is infinitely more wonderful, it follows the same system of lawful truth throughout eternity. The science of biology and zoology finds, organ for organ to equal the same unit of life measured by the light of one soul. It is merely a question of organized intelligence that makes all this difference. If the first moneric living cell was not created out of the world's law of truth, then the science of biology and zoology would not come within the range of possibility.

With this general outline of recognized and established facts, let me try and give a crude and nebulous hypothesis of the relation that the coccic and bacillic cells of life play in the problem of disease in a general way. I have no doubt that there is a biological conflict of survival among the organized and specialized individual microscopic living cells, just as surely as that it obtains among the higher animals to which this idea is confined at present.

We know that the ameba exists. Indeed, it is the basic source of all known biological science. When the ameba throws out a pseudopodic tentacle in any direction, we know it is inspired by the greatest amount of food surrounded by the kingdom of its environment until it becomes so saturated with repletion, it reaches a limit of tolerance; can go no further; still must go on. This causes a segmentation of the ameba that finally results in an elongated bacillus. On the other hand, when the environment becomes generally lean and impoverished, no longer throws out pseudopodia, because it takes all the resources within its command to imbibe the general nourishment by the outer layer of its membrane to maintain the continuance of life. This naturally means it becomes smaller, rounder and more specialized a micrococcic life with many variations personified by the famished wolf and venomous serpents on a larger scale.

When one of these specialized coccic cells of life enters the serum of our blood, it finds a barbecue on which it feasts, and multiplies with geometrical rapidity. This becomes known as a general malaise accompanied by an increasing fever on our part, until this conflicting reaction reaches a limit of tolerance it finally breaks out on the surface of the skin by an eruption as means of escape. The symptoms are so near alike, no man dares make a positive diagnosis before the eruption comes on the surface, the survival of which equals the specialized attack on our serum in which it becomes so indelibly written, a diagnosis is of the greatest value.

General experience bears evidence that this conflict of survival is so keen and rapid, it almost invariably ends up in favor of man, because the wealth of his specialized cells hold the balance of organized stored up serum, the battle of which is recognized by the word — convalescence. The strife of one soul ends up so keen a conflict between the living cells — per se — individually. It was mainly fought out and confined to the serum of the blood, although each specialized cell had to help support it. The serum of our blood cannot be called a tissue in proportion it falls below a living cell. To say it equals common matter does not hold true, because it seems to be the basic force that swings between the two. This might properly be called protoplasm, although in a different sense than used before that has legitimately found its grave.

We know this biological conflict of reaction is somehow indelibly written in the serum of our blood, it causes an immunity to future attacks. This appears to hold true among all the eruptive fevers. To say it at least is a working hypothesis in proportion conforms to the actual facts of practical experience, is no stretch of the imagination.

In malarial fever this appears entirely different. Malaria is specifically an endemic disease that can only be won by contact in the local environment, including the mosquito. It is not infectious or transmissible from one to another. What is extremely wonderful, however, is its periodicity of expression. These living malarial cells first multiply until they equal something like the number of our red corpuscles before it ends up in an acute chill followed by a fever, that manufactures an antitoxin in the neutral

serum that tires out both these contending armies. Must alike retreat and fall back into the general resources of man's whole recuperative power in the form of nourishment, to again repeat the next afternoon's battle.

Unrestrained and everything equal between these two contending armies, this conflict must cease in time and end up in man's favor. But before this transpires, it has left its scars in the red corpuscles burdened by an enlarged spleen and weakened function of the liver as evidence it took the whole resource of man's organized life to survive this attack.

There is still a greater and more far-reaching problem that comes in sight for solution, it will take some time to solve. I observed two carbuncular infections end up in acute attacks of articular rheumatism Every confluent variola ends up in the secondary fever caused by the streptococcus pyogenes. An acute ulcerative diphtheria observed in the latter state of its being, generally ends fatal. This holds true in scarlet fever, although the problem is much more complex. Modern medicine, like surgery, should alike tremble before laudable pus. The biology of "pus" is still one of the greatest questions that comes up for solution, the lesson of which has yet to be learned. Just as surely that modern surgery holds the throne today, compared with which the present state of medicine is a comparative beggar, just so sure will it end upon the throne when the knife of the surgeon ends up as an artistic skilled carpenter that all mankind respects.

Opsonins have lately come upon the stage. The fact that they now engage the best thought in the civilized world that absorbs the keen investigation of the ripest scholarship, is in itself evidence there is a far-reaching underlying law of truth in the earliest hour of its being as a working hypothesis that no man now dares to even venture what the wealth of unfolding possibilities in the cure and prevention of disease are hidden behind this door. Please remember, however, and never forget, that opsonins, like antitoxins, are merely facts that play a related part in the whole world's system of lawful economy, the truth of which is always and invariably measured by the light of man's conscious soul of feeling as an effect that ends up in the unit of his life. Is there a cause that equals all this?

To summarize these known biological facts let me illustrate this general idea by three of the most typical and familiar diseases with the hope of possibly gleaning a crude and primitive outline that borders on the law of a working hypothesis.

Diphtheria is a local disease. It is a conflict between two local armies of living cells. This reaction is so acute and short in duration the poisonous product ends up in the serum as a result that equals both. If man survives this plastic serum he rapidly recovers comes back to his normal state. This is why the immunity of diphtheria is short in duration. Our experience with antitoxin confirms this idea. We also know that the cells in the throat are generally weakened and more susceptible to "colds." All this proves that the battle was a local conflict among living cells. This unfolds a lesson that has yet to be learned.

When one becomes vaccinated or infected by the smallpox "cocci" the battle is confined within the serum. This reaction can only escape by the route of the skin as a general eruption that oozes out serum or vaccine virus permeated with endless cocci of viril smallpox germs of life. This story is so long and alike familiar to all, it is only necessary to state that this reaction has somehow become indelibly written in the serum that makes him immune. This brings up the greater thought: Is it possible that the serum is a living tissue? I can with the same law of truth answer this question by yes, and no. Only organized specialized cells come under the name of life as units of all known economy that must have a plastic serum of neutral environment wherein alone can live with some system of relation from cause to effect. This is what the word protoplasm really means. Radically differs from the idea it was conceived in a quarter of a century ago. The ideas of man are being so rapidly unfolded, it keeps us busy to hew and adjust our timbers in harmony with its developing growth.

In malarial fever the reaction is much different. Indeed, it appears to be neutral between diphtheria and smallpox. If we did not know the general principles of biological economy in common with the facts that have lately been revealed and exposed in malaria, then it would not be possible to assimilate them into one real and ideal light of truth, the unit of which begins in God or life.

The malaria coccic cells of life are born out of and live in an environment of plastic organized protoplasmic humidity that is extremely different from the time when the first primitive protoplasm made its appearance on the earth. Nevertheless follows the same laws of physical economy. If man once learns the world is as young as old, with the meridian of God's mature Life as the one immortal power of soul to which is limited with system from cause to effect as one law

of truth; then he will really end up as a reasonable man, and learn what the invasion of malaria means.

Malaria lives and thrives in the realm of its own environed home with endless numbers, but cannot grow larger, because it takes all the resources of its command to maintain its existence in the variable state of the seasons. Hence is generally confined to the lower latitude of the temperate zone with its home in the marshes. When man comes in contact with them, they at once invade his serum that is better than the one in which they live, and mutliply with great rapidity. This does not cause much malaise or physiological distress, because the wealth of economy is something like in relation. When the number becomes so great that it famishes the resources of the serum make a combined attack on the red corpuscles of life. This is announced by a chill as evidence the battle has begun. Fever soon announces that man has won the victory for the hour by manufacturing an antitoxin that so enables both alike to retreat back into the general serum that has not been harmed much. Why large doses of quinine administered before the chill comes on, stops and inhibits its development.

Drs. Flexner and Jobling in their late article on "Antimeningitis Serum," published in the Journal of the American Medical Association, July 25, 1908, state: "Attention was previously directed to the rapidity with which the exudate in the meninges loses turbidity under the influence of the serum injections. This fact has been noted again and again in the subsequent cases in which the treatment was carried out. Indeed, it would now appear as if the fear we expressed that the cases with strictly purulent exudates might be less amenable to the action of the serum, was premature. A fair number of patients in whom the notes state the spinal exudate to have been purulent have recovered, and the rapid clearing of the exudate was observed even in them,."

In my opinion this is one of the most remarkable facts that has lately come within our experience, and is worthy of a moment's special attention. This portrays a far-reaching biological generalization so comprehensive an ideal lawful system of related economy, it naturally brings out the thought: If this serum treatment can accomplish all this, then the medicine of the future opens up no end of possibilities. Indeed, compared with which even modern surgery will have to look after its laurels.

This idea was clearly illustrated to me in an opposite way by a fact of actual experience that transpired before my eyes. Seventeen years ago I called on Dr. E. C. Dudley to remove a pus tube in a private home. Please remember that at this time the practice of surgery was a distinct shade younger. During the operation the tube ruptured. After sponging it out carefully and about to close up, he was asked the question: "Are you not afraid there is pus enough left to cause an acute inflammation?"

He answered something like this: "When the cause is removed even the peritoneum will take care of a certain amount of pus. This proved to be true in this case.

These extreme examples of biological economy reveal and unfold a wealth of real and actual illustrative evidence that harmonize with the daily round of present experience, and equals the jump from the peritoneum up into realm of the spinal fluid wherein we find that the same laws of biological economy hold true here, like everywhere else in the universe, the truth of which no man can deny, doubt or question.

In the July number of the Medical Times, I formulated this whole world problem down into the generalization:

"Man's life is the ideal unit. He personifies and epitomizes the world as a miniature effect; born, created, or evolved out of the world's cause. It is also absolutely certain that mankind generally bends every effort to ascertain the cause of life more and more. The rapid strides of modern scientific discoveries bear unquestioned and undeniable evidence that every detailed specialized discovery plays a related part in the whole unit of the world's lawful system of economical truth. Let me cast this world equation as it appears to me. The world lives. God's life is the immortal unit. The power of the universe equals the conservation of energy to which it is limited, that is never more or less than the soul of one life. This is the limit of man's knowledge as an effect born out of one cause of Life."

Professor Elie Metchnikoff in his great work on "Immunity," says: "The phagocytes enter into a struggle against microorganisms, and rid the animal organism of them without requiring any previous help on the part of the body fluids."

This is true, but not all of the truth. Phaogcytes and some mico-organisms are a part of the fluid—blood—where the conflict takes place. Not one thing today is more absolutely certain then that this reaction ends up in the changed product of the serum and cells so clear, it equals a chemical formula, the lesson of which we have yet to learn. Man has entered upon this new threshold so far, feels sure he will reveal secret after secret without end measured by the light of his life as an effect.

Phagocytosis is merely a related part in the whole world's system of lawful truth, limited to the power of one conservation of one energetic soul of one ideal unit of life. What is most wonderful and unfathomably strange, is the simple truth: Man's life epitomizes all this. The thing we now call "mind and matter" is the boiled down reason of man's ignorance et damnatio ad nauseum, out of which hell and the devil was born.

The "cancer problem" has lately been summed up by Dr. George W. Crile in the statement: ' It is probable that the (cancer) cells may multiply indefinitely and may, possibly, like the ameba, prove to be immortal."

This is a generalization of the first magnitude. It is at least harmonious with the general system of organized and established laws of real experience in every department of knowledge at present. A new idea like this is a stepping-stone that leads the way up higher, until it finally becomes possible to offer a general hypothesis of hope along the route of our work along least resistance or greatest economy. Hence should be welcomed and cultivated by all in ratio hews to the actual facts of real experience.

What we know as and call the cancer cell today, is merely the local reaction between these two living cells, the conflict of which eventually finds its expression in the serum of man's blood. Why modern surgery pleads to enuclate any growth that even borders on cancer. This fact unfolds a volume of evidence so clear, it almost demonstrates it is a local disease in its inception. The unmolested reaction of this conflict also bears evidence it will finally eat up man's life. Hence is the most horrible and dreadful of known diseases.

This problem of cancer is becoming hedged in on every side closer and nearer towards the ultimate solution. The cellular conflict between the cancer cell and the specialized living cells of man's life end up so extreme a biological reaction, I feel sure the moment the cancer germ is traced down to the ultimate home of its environment, it will be the easiest of diseases to exterminate.

Nevertheless, there is still a vast amount of work to do before it becomes possible for man to even learn how to follow this ideal trail of one true law of economy.

Verworn said: "If the pathologist and the clinician desire to advance in the manner of the different processes of disease they must have definite conceptions of the general activities of living cells."

Is it not wonderful it took all these ages of trial to lately learn what typical malarial fever means? Can one still doubt that there is a biological conflict of survival among living cells? Among all is there one that dares deny this simple truth which ends up in the daily round of our actual experience? Until one can produce a ray of evidence in the world's lawful system of economy that does not reveal the simple light of God's living soul of truth? Am I not justified in keeping this school open? Also justified in asking some questions of science that immediately concern all?

If one gives a general answer does it not put the rest on the defensive? With all modesty I ask the following questions:

Is there one scientist among all today that does not strive to find the ultimate atom of physical cause? Do not all end up bankrupt in this effort in ratio it does not exist? Has one the least comprehension what system stands for? Understands what law means? Conceives what the word truth personifies? Does this not demonstrate modern science is unscientific in ratio does not know, life can only be caused by life? Will one deny that soul, conscience, or feeling does not play a related part in the whole wealth of known economy in this world equation from cause to effect, and effect back to cause? If one of these terms fail, does not the whole structure crumble to pieces? Can one question that it takes all the resources to the world's conservation of energy to create man's conscious soul of feeling as an effect which ends up in the unit of his life? Is there one man still that doubts or questions God is not the immortal unit of Life in which all begins and ends without end? Does not God equal all this? If not, please find a flaw in this system of lawful truth as a means of retreat, then I will close this simple book of God's living soul of truth and gladly retire from the field by admitting it is not worth a visionary dream. All ends up in the black night of annihilation that horrifies common sense.

CHOLERA IN MANILA—Press reports tell us of the ravages of cholera in the Philippines. According to a recently published report there have been 10,681 deaths from this cause since January 1st.

MEAT AND HEART DISEASE.—Dr. Huchard, a French medical authority, has declared that eating of meat is responsible for the greater number of heart diseases. Dr. Wolfhügel, a Bavarian army surgeon of considerable note, has collected a large number of statistics which, he declares, proves the correctness of Huchard's view. He found that the number of butchers that die of heart disease is twice that of every other class of tradesmen.

SIMARUBA IN THE ILEOCOLITIS OF INFANTS.

JOHN ZAHORSKY, M. D.

ST. LOUIS.

PERHAPS it would be difficult to find a disease which varies so much in duration and severity as that group of diseases known as ileocolitis of infants. Consequently, the valuation of any therapeutic measure used to assist the little patient is extremely hard. It is easy enough to get recoveries under the most adverse forms of treatment; and a perusal of the literature of this subject which has been inflicted on the profession in the last century gives the impression that every drug has been tried in its disease and some infants have recovered under the use of all of them.

In general, the authorities are agreed that two measures are very valuable, namely, cleansing the intestinal canal by a laxative, and deprivation of food. Irrigation of the colon is often substituted for the purgative or used in addition. The cereal decoctions are generally used to supply water and satisfy the natural cravings of the infant. These measures promptly relieve the majority of the intestinal infections.

When the intestinal wall becomes infected or diseased the problem is much more difficult. What shall be prescribed then?

The bismuth preparations have had the approval of many years, and in simple gastro-enteric infection a few good doses of bismuth acts very well, but in ileocolitis it is only occasionally that the practitioner will be satisfied with the action of this drug. Lately, there has been increasing testimony to the value of the tannin purgations. I usually prescribe tannalbin, and it certainly diminishes the number of stools and, in a measure, inhibits intestinal putrefaction. Rarely, like all preparations of tannic acid it is not retained by the stomach. The powder should be given in 4 to 5 grain doses three or four times a day, and as it is not miscible with water it should be administered in thick gruel (rice water or barley water).

As is well known, ileocolitis is often a very protracted disease. Meanwhile, by careful hygienic measures and a minimal diet the physician prolongs life until the healing power of the body overcomes the infectious agents. Many times all evidences of infection have disappeared, and yet the infant does not show a nutritive improvement. Like other physicians I have felt that some medicinal agent, some tonic, is needed to stimulate the nutritive processes to take up their normal work, True, nux vomica, cinchona, alcohol and other tonics have been recommended and are often used with resulting benefit, but all of these do not seem to fulfil the requirements of these cases.

About two years ago, at the suggestion of Dr. E. W. Saunders, I commenced to use simaruba in the ileocolitis of infants. This drug was official in 1870, but for some reason it was dropped. Simaruba is the bark of the root of simaruba amara, a tree which is native in French Guiana and the West Indies. The drug is usually prescribed in the form of an infusion or decoction.

The drug belongs to the class of the simple bitters. Its active constituent, according to Morin, is quassin, or picrasmin. This alkaloid is said to be identical with that obtained from quassia. It seems to be the general impression that the therapeutic properties of simaruba can best be utilitzed by substituting quassia for it. My own experience does not attempt to solve this. From reports of physicians in the Orient it seems rational to assume that simaruba has a specific value in the treatment of dysentery. Whether the same favorable results we can be obtained in ileocolitis from quassia I do not know. My experience is limited to simaruba.

The infusion of simaruba has a very bitter taste. In order to improve this I make use of the following:

℞ Tr. cinnamomi..... ʒj
Infusi simarubae..... ʒiij
Syrup anrantii, q. s. ad..... ʒiv
M. Sig.: Teaspoonful every four hours for infant of eight months.

The cinnamon acts as a preservative, and is useful in digestive disturbancces. This mixture must be kept in a cool place during the hot weather.

I have prescribed simaruba in about twenty cases of enteritis and ileocolitis during the last year, and from this small number of cases I have received the impression that it is a valuable tonic in the summer diarrheas of infants. In two or three days after beginning its use, the baby will show a marked improvement, the appetite is better, the loss in weight stops, the stools are less frequent and show a better consistency and color, and the infant will be less irritable. The drug is of doubtful benefit during the first few days of the disease. In one case dysentery promptly recovered in four days when simaruba and barley water was given. I will report two cases to illustrate its effect.

CASE I.—M. G., male, aged 13 months, suddenly became ill in October, 1907. He had been a healthy well nourished baby, who was fed at the breast until seven months old, when he was gradually placed on cow's milk.

During the last three months some solid food has been given. The acute infection was traced to ice cream bought at the drug store. The onset of the disease was characterized by fever and vomiting which was soon followed by diarrhea. The stools contained mucus and blood. Considerable tenesmus was present.

A dose of castor oil was administered and no food was given for twelve hours. Then barley water and toasted bread moistened with weak tea formed the diet for two days. Mutton broth and rice was added to the alimentation on the fourth day. The white of egg was also given. Following the initial purge, bismuth subgallate was prescribed for two days. Tannalbin ws substituted for this on the third day. A few doses of paregoric were given in order to diminish the tesemus.

The temperature raged from 101 to 103 degrees for three days, then gradually declined to normal.

The tannalbin was not retained on the sixth day and the aromatic syrup of blackberry (N.F.) was administered for a few days. While the fever had subsided at end of the first week, eleven days later the baby was still not well. He had no appetite. Several passages a day which contained mucsus showed that his intestines were still not healed. The parents were getting discouraged.

Then simaruba was prescribed in the form of a decoction. A teaspoonful was given every three hours. In three days the clinical picture had changed completely. The child seemed to feel good, played, slept better, cried for his food, and the stools were less frequent and much better in color, although some mucus was observed occasionally.

Case II.—E. H., aged nine months, a boy, lived in Arkansas, where six weeks before my first visit, he was attacked by severe dysentery. The disease was very severe and after six weeks of illness the infant had become very much emaciated. He was brought to St. Louis in July, 1908. The mother thought that the change of climate would bring about convalescence. She continued giving him the medicine which he had taken before leaving Arkansas. As there was no improvement after ten days I was called to see the baby.

Examination showed extreme emaciation. The bowels moved five or six times daily, and still contained much mucus and occasionally blood. The appetite, however, was fair. He had been given barley water and condensed milk, but the last few days he had refused it, also the broth wihch had been given for several days was not taken.

A decoction of simaruba was prescribed, to be given in teaspoonful doses every three hours. As a food rice custard was ordered to be given every three hours. The little patient took the rice custard greedily and in three days commenced to gain in weight.

The value of simaruba as an intestinal tonic in the intestinal diseases of infancy has not been studied sufficiently, but my experience encourages me to continue its use.

1460 S. Grand Ave.

Subscribe for the Medical Fortnightly.

Are the Dead Alive?—In the October Delineator starts a remarkable account of what has been done to date by various scientists working in various countries to unravel the mystery of life as it is revealed to us by the agency of death. Do the dead really live? You are confronted by a subtle question here. Strange things are happening—no doubt have been happening these thousands of years, but only now man is beginning to get a faint understanding of what they mean. Telepathy, clairvoyance, clair-audience, trance and spirit writing, dual personality, possession, levitation, materialization—these are strange and new terms to which is being added an even stranger and newer singificance. We are living in a time when brick and stone are not near as solid and impenetrable as they used to be, and space is not nearly so empty. The clouds are hardly more evanescent than we, and our houses and the things which we consider so solid and durable are as shadows only. All the world is awakening to the idea that force is the great thing—a strange great ocean of unknown force, which storm and rages about us. And man, on his little planet, is like a sailor in a little boat, or a bird in the ocean of the air. Whither comes he? Where does he go? Scientists are asking this question, but not in the old way! Now they watch and weigh and prepare tests and set traps in a subtle effort to surprise the Great Artificer at His work and to make Him reveal how it is done. That it is for which they are striving. That it is for which you and I are waiting their reports. We want to know how it is done. Have patience! The world is acutely interested in this problem now, and will find out—not everything, not exactly how it is done, but something more than we now know. The world is at work, and we shall know—not as the old phrase has it, "what we shall know," but a great deal more than we have ever dreamed of in our philosophy—and that were long.

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OFFICIAL TRANSACTIONS.

CLINICAL HISTORY AND PRESENTATION OF A CASE OF PROBABLE BANTI'S DISEASE.

T. D. WOODSON, A. B., M. D.

RICHMOND, MO.

THIS case presents a very interesting picture of an exceedingly large spleen accompanied by a marked anemia without any apparent cause.

Patient does not speak any English and the history previous to the time he came in the hospital is therefore very brief. He is a Macedonian, 30 years of age; married, but has no children. While in the old country he was a shepherd; since coming to this country he has been working in a steel plant. He has been a heavy drinker of alcoholics and smokes many cigarettes. Family history is negative with exception of mother, who died of some heart trouble. He does not remember having any of the diseases of childhood. Had pleurisy about fifteen years ago. Several attacks of melancholia while in Macedonia. Denies positively any history of gonorrhea or syphilis.

Patient entered hospital March 16, 1908, complaining of general weakness, pain in chest, cough, shortness of breath and severe sweats, all of which symptoms have been of about six months duration. One week before coming to the hospital he noticed a fullness in the abdomen, which had given him very little discomfort. He expectorated great quantities of mucopurulent sputum and suffered at times from severe headaches. For the first ten days after coming to the hospital he had some fever, but since then, temperature had been practically normal. On one occasion he had slight epistaxis. This is the only instance where any history of hemorrhage can be elicited.

Patient was a fairly well nourished white male. He had a languid expression with a peculiar bronze color of the skin. Conjunctive and mucous membranes pale. His legs were edematous. He was unable to rest in bed unless he was propped up.

The chest gave the physical findings of a severe bronchitis with emphysema. Repeated examinations of the sputum failed to detect any tubercle bacilli.

The heart was enlarged to the left and apparently pushed upward. A systolic murmur was heard at the apex and was transmitted into the axilla. Compensation of heart was failing fast.

Examination of the abdomen revealed a large tumor mass in the left hypochondriac region; this mass extended downward and to the right nearly to the brim of the pelvis. It was hard, notched, readily palpable and movable. This mass from shape and position was determined to be the enlarged spleen. The liver was palpable at the margin of the ribs.

A twenty-four hour specimen of urine revealed the following: Quantity, 1725 c.c., amber; specific gravity 1022. Small per cent of albumen. Few fine granular casts. Some biliary pigments. No sugar.

Repeated examinations of the blood for plasmodia malariae were negative.

Examination of blood from splenic puncture was negative. The blood findings were as follows:

March 18th, 1908.—Leucocyte count, 6,500; erythrocyte count, 3,128,000, hemaglobin estimate, 36% (Dare's); color index about.75. Differential leucocyte count: polymorphonuclears, 69.1%; large mononeuclears, 8.9%; lymphocytes, 16.4%; transitionals, 4%; myelocytes, 1.07%.

April 8th, 1908.—Leucocyte count, 2,300; erythrocyte count, 2,002,000; hemaglobin, 40% (Dare's); color index, .99 plus.

April 27, 1908.—Leucocyte count, 3,650; erythrocyte count, 2,600,000; hemaglobin estimate, 50% (Dare's); color index,.96 plus. Differential leucocyte: Polymorphonuclears, 69.1%; large lymphocyte, 10%; small lymphocyte, 9.0%; eosinophiles, 2.0%; transitional cells, 2.0% myelocytes, 4.0%; fragile cells, 3%.

May 6th, 1908.—Leucocyte count, 2,400; erythrocyte count, 3,040,000; hemaglobin estimate, 55% (Dare's); color index, .90 plus.

Smears all showed some poiklocytosis, macrocytes and microcytes. There were no neucleated red cells.

The diagnosis was suggested by the apparent enlargement of the spleen with the severe anemia and leucopenia. The relative leucocyte count normal.

Differential Diagnosis.—An enlargement of the spleen from malaria was excluded after repeated examinations of the blood for the plasmodia malariae, and the absence of any history of malaria.

An enlargement of the spleen from cirrhosis was excluded by the absence of further evidence of cirrhosis and by the fact that the spleen is as large as it is. Oestrich reports a series of cases in which the cirrhotic spleen averaged from 10·15 cm. long, 5-9 cm. and 2·5 cm. thick.,

Cases of suspected Banti's disease have been reported, which later turned out to be syphilis of the spleen. Congenital or acquired syphilis were excluded by history and absence of further clinical evidence. Leukemia was excluded by the presence of a leucopedia and the general blood picture.

As the size of the spleen has failed to improve with the other conditions due to passive congestion and the fact that it is as large as it is, excludes it being an enlargement of the spleen from passive congestion.

The absence of any family history, the absence of any hemorrhages and the late onset points toward Banti's disease rather than primary splenomegaly. The absolute diagnosis as to which of these two it may be, can only be made after a long period of observation.

Tropical splenomegally is readily excluded by the fact that the patient has not been in the tropics.

Banti's disease with cirrhosis of the liver, as originally described by Banti was divided into three stages: 1st. Stage of anemia. 2d. Transitional stage. 3d. Stage of ascites.

The stage of anemia is characterized by the slow pernicious development in size of spleen, the anemia and leucopenia. The relative leucoctye count normal. The absence of nucleated reds. The period lasts on a average of about five years, but may be longer.

The transitional stage is short, lasting about one month. It is characterized by digestive disturbances and increased urates in the urine.

The stage of ascites is characterized by the slow development of ascites, a fluid of a simple transudate. Bile is found in the urine without clay colored stools. This stage lasts several months, usually terminating with the patient's death. My study of the case leads me to believe that patient is in the first or stage of anemia.

The patient has been on digitalis, iron and tonics. Fowler's solution was given for some time. Physically he has improved much. Heart is fully compensated, and he coughs much less. He is much stronger and in better spirits.

Medicinally the treatment in these cases has been unsatisfactory. The Roentgen-ray has been used with some good results.

Torrence in Annals of Surgery, January, 1908, gives a summary of cases treated up to date with splenectomy. Out of thirty-six cases operated on, there were twenty-seven recoveries. A large number of these were operated on before asepsis was as thorough as it is now.

Splenectomy has been considered on this patient. His general condition has never been such that would warrant such treatment.

Schiassi, Journal of the American Medical Association, March, 1906, reports some cases with the spleen treated in same way as the liver is in the Talma operation. Some good results have been obtained.

Rules For Tuberculous Travelers.—According to orders issued by the Lehigh Valley Railroad Company all consumptives traveling on its trains must provide themselves with sputum receptacles and private drinking cups. This order was issued in response to a request of the Pennsylvania Society for the Prevention of Tuberculosis that the railroad companies aid in stamping out tuberculosis by protecting travelers from danger of infection by the carelessness of known victims of the disease.

Charitable Bequests.—By the will of Mr. Frederick Cooper Hewitt, who died recently, in Oswego, N.Y., the New York Postgraduate Medical School and Hospital receives $2,000,000; Yale University, $500,000; the Little Missionary Day Nursery, New York, $200,000; the Free School for Crippled Children, New York, $100,000; the Netherwood, N.J., Fresh Air Home, $100,000; American Society for the Prevention of Cruelty to Animals, New York, $10,000; the Sheltering Arms Society, New York, $10,000; the Temperance Industrial and Collegiate Institute, Clermont, Va., $3,000, and the Coburn Free Library, Oswego, N. Y., $3,000. A few days before his death Mr. Hewitt gave $22,322 to the R. A. Packer Hospital, Sayre, Pa.

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EDITORIAL

Making Quacks.

THERE is not shadow of doubt that the vast majority of irregular doctors are such as a matter of choice; the quack and the charlatan have seen that money could be made faster by irregular methods than by following the beaten path, and have sacrificed position and dignity in the ranks for the one object. This has been true and is true yet. But there has come with reorganization and centralization the possibility of a new method of putting men in this category, men who have none but regular and honest purposes and who are exceptionally equipped scientifically. It is the theory that our organization is open to all who do not offend against the rules laid down in our principles of ethics; these rules include nothing which is not reasonable and decent. But even the smallest of the contingent societies which make up the great Association must of necessity have its own laws and its officials to carry them out; its laws include some initial procedure for prospective members and a scheme for electing them to membership, and a no less important scheme for the trial and assessment of punishment for members who are charged with and convicted of misconduct. It is not an unheard of thing for men, who should by every idea of justice be members, to find that the personal element is sometimes very much in the foreground, and that a vote based on essentials, as propounded in the principles of ethics, is an impossibility. A man who will vote against an applicant simply because he does not like him is doing a rank injustice; should be strongly discouraged in his course by all thinking men who have knowledge of the act. Nor is it necessary to rake up errors ten years past; a man who has lived a proper life for five years cannot be a very bad fellow even if he did commit ethical sins longer ago. The determination of misconduct is an even more difficult proposition. It is our belief that nothing but misconduct should keep a man from becoming a member of his county society; it is also our belief in the case of accused members that every means tending toward conciliation and reformation should be earnestly employed before the more severe means—suspension and expulsion—be considered or employed. The effort should be to keep men straight rather than to cast them out and class them with the unregenerate. To suspend or expell a man; to hastily advertise the fact through the State and National bodies is pushing him into worse things than he himself has ever thought of unless he be one on whom patient efforts toward reformation have been used without effect. We believe that there are very, very few who have committed the unpardonable. sin.

Are we to close the gates of the medical paradise to those who have committed only a little sin?

Membership in local societies has taken a new significance under recently changed conditions, the time has come when such membership can be considered a *right* which any physician who conducts himself regularly has justice in demanding. Membership carries with it certain privileges and responsibilities, it gives a dignity and a fellowship. It should not be lightly denied nor, when the relationship has been established, should the ties be broken but for most aggravated cause. Tolerance and a stretching of justice in an effort to conciliate and reform are a necessity if we are not to have a responsibility in the making of a new class of irregulars for the days which are almost here.

Facts Proven to be Fallacies.

WHEN all is said it remains a fact that it is easier to get the ear and the co-operation of those occupying high places in the medical profession, if you would introduce something radically new in the way of a therapeutic procedure, than it is to interest the rank and file of the profession. The profession as a whole is singularly conservative and waits for its leaders to speak before accepting and using: we are just beginning to observe that it is easier to bunco the leaders of a certain class than it is to trick the masses. The whole

profession sometimes accepts an error, but it is invariably led into it by those who should have been more conservative leaders. We are thinking of lithium. When the uric acid theory was promulgated what a furor was precipitated. The cause of almost every obscure trouble was found! The journals were filled with the subject! Shortly subsequent to this an equally startling announcement was made, and that was that lithium was the sturdy antagonist of uric acid; again the journals found material in abundance, and from authorities. That the two theories were almost universally accepted is a well known fact; they had a long season of being true, but what is not so well known is that neither is true today. The demonstration of this has not been brought to the attention of the profession so persistently as was the original proposition, and we know many physicians who are still working under the old delusion and who believe they are working effectively.

If we had something almost preposterous in the way of a medicine and we wanted it used we would approach the "authorities," such as are found in every city, whether it was a splint for the cure of typhoid or vaccine for the cure of Pott's disease, and we would certainly get it going for the authorities *use things*, and they have a circle of understudies, and they write! The average physician would be utterly discouraged if he had to abandon methods of treatment with the recklessness that can be seen by those who will see. The difference between the average man and many experts is, that the latter always has something startlingly new to present which covers that which he is relinquishing. The unfortunate part is that his enthusiasm over each new subject is imparted to a number of followers who accept his dictum as inspired and if he ever recant the facts reaches them tardily if at all. Of course there are real investigators, their numbers is rapidly increasing, and may it further increase! The signs of the times are good, but we have not yet reached that happy state when we work with therapeutic certainty and exactness. We have still to do not a little of study over "authorities," and we are learning that we have been much more liable to be mistaken in men than in remedies. There is no place in medicine for fads, therapeutic or otherwise, and the man who has something of an innovation to spring every time you meet him is not the safe and sane leader; it is not men of this class who have made medicine so much a science as it is. The medical profession is, fortunately, a conservative body, and while it has made mistakes, as in the case mentioned above, it seldom gets badly entangled with an error. But such entanglements do occur just often enough that we should be very slow about objecting to therapeutic propositions which do not exactly meet with our approval, and slower still about urging on others the adoption of measures which have pleased our fancy, but have not been placed in all lights and studied from all points of view. This is exactly what the new school of investigators is being educated to do and, as we said above, the signs of the times are good.

The Barnes Medical College Case.

THE action of our State Board of Health refusing to admit graduates of the Barnes School to examination required before practicing in Missouri, on the ground that the school had not the equipment required by the board, occasioned not a little flurry of comment. The school acted promptly, taking the matter into the courts, and has gained an order from Judge Muench's division of the Circuit Court, that their graduates are to be examined by the Board. The following excerpt from Judge Muench's decision fully explains his reasons for making it:

"The question to be determined here and now is whether or not the order of the State Board of November 22, 1907, declaring Barnes University to be of ill repute, is and was just and reasonable in view of what had preceded.

"Without entering into details as to the several steps that led up to this harsh conclusion, it may be said, generally, that a series of unfortunate misunderstandings seems to have arisen between the Board upon the one side, and the parties responsible for the management of Barnes University upon the other—misunderstandings which naturally led to others and finally culminated in an apparent loss of the good feeling and mutual forbearance which any one would naturally expect to find among members of the same learned profession

"Obviously, the date originally set by the Board for a visit and a through inspection of the University was not kept, and this seems to have displeased its young secretary who indicated that displeasure in writing; then such visit was made on a date when the faculty was not present, because the school was in vacation and instead of calling for those in real authority, the Board made a necessarily perfunctory and inadequate examination under the guidance of the janitor, and without having opened to them a single casement or locker in which, confessedly, all the valuable apparatus of the school is safely

kept. Neither did the list of answers by the secretary (Exh. N.) supply such want of opportunity, because the same does not pretend to go into detail as to apparatus actually possessed by the University

"Upon this so-called examination, this school along with all other medical colleges of the State (barring one) was notified that there was a deficiency of laboratory equipment and of clinical opportunities which must be made up by October 1, 1907. To such notification the dean of the university, whose character and probity is conceded even by his opponents in this case, replied on September 30, 1907, that improvements had been made and were being made by them, in the expectation of meeting the requirements of the board. Thereafter in October, 1907, several efforts were again made by the board to examine the laboratories and clinics of the university, but for reasons which rested partly in unwillingness, partly in plain misunderstanding, and not a little in an apparent lack of genuine good will toward the university and those connected with it, no meeting was ever accomplished. Without weighing faults in this connection, the plain fact remains that the State Board did not make any examination of the subject matter upon which they were undertaking to pass a most momentous and fair reaching judgment; whether rightly or not, they never inspected these laboratories to ascertain the actual presence or absence of the divers apparatus called for by their "minimum requirements," and they simply adjudged that because they saw but a part of it from the outside of locked cases, and no one was present the time who could open these for them, that no such appartus existed.

"It is true that during the subsequent meeting at the Southern Hotel, in a interview between the dean of the school and several members of the State Board, the latter understood the dean to declare that the school could not, and would not, procure all the apparatus deemed necessary by the board. But the dean, in his testimony, explains that such remark was addressed to a demand, as by him understood, that the school should purchase and supply one high-power microscope for each two students in the sophomore class of more than eighty members, which demand he deemed exorbitant, and which was clearly unjustifiable, if made, under the board's own schedule, requiring but one microscope for every two students in sections of 24. While I am prepared to hold that a formal refusal of the representative of this school to comply with the requirements of this schedule would have excused the making of any further personal investigation, and justified the exclusion of students of this school from examination, yet I am satisfied from all the evidence that Dr. Kieffer's explanation of this incident is the correct one, and that no actual refusal to comply with the reasonable demands of the board was then and there declared or intended by him. This conclusion seems all the more justifiable since the uncontroverted evidence shows, not merely that all the appliances really called for by the "minimum requirements" were either already owned by the university, or secured on fresh requisitions, and such a declaration on the part of the dean would have amounted to a piece of idle defiance. Not knowing what parts of the scheduled apparatus the university did, or did not have, there is small wonder that none of the notifications of the State Board ever particularized or pointed out just what they claimed was lacking, and that they do not even now attempt so to do by their return; but a failure to point out is another element in arriving at the necessary conclusion that the university did not receive at the hands of the board that full and fair opportunity which even administrative bodies in the exercise of a sound and reasonable discretion, must accord.

"I conclude, therefore, that the action of the State Board, based upon no other or different information and investigation than that disclosed by the evidence, and briefly adverted to above, was without authority, and in oppressive and unreasonable in fact, as applied to the graduating class of 1908; and peremptory writ of mandamus will therefore be awarded, commanding said State Board of Health, and the various members thereof, to accord to the relators and such of them as shall have complied with all other conditions of the Statute of 1907, an opportunity with all convenient speed to be and appear before said Board, and to undergo the usual examination accorded to other applicants for license to practice medicine and surgery in this State, with costs."

We are informed that the board purposes to appeal from this decision.

Dr. J. W. Pettit.

Dr. J. W. Pettit was born in Sparta, Randolph county, Illinois, in 1848, where his boyhood was spent and his preliminary education obtained. He entered the Louisville Medical College in 1870, receiving his degree in 1873. After some years of practice he took a supplementary course at Rush Medical College, receiving an ad eundem degree in 1884. He

has been continuously in practice at Ottawa, Ill., for the past thirty-four years. He joined the Illinois State Medical Society in 1888, and has been active in its councils since joining, having held numerous offices and being a member of various important committees. He was for a time chairman of the Medical Section and was chairman of the Committee on Medical Legislation which secured the present Medical Practice Act of Illinois. H is a member of the American Medical Association and various of its auxiliary societies; of the Chicago Medical Society, of the Physician's Club of Chicago, and of other medical organizations.

Dr. Pettit has shown not a little interest in Public Charities in his State, he was at one time president of the Board of Trustees

DR. J. W. PETTIT
President-elect Illinois State Medical Society.

of the Illinois Charitable Eye and Ear Infirmary of Chicago. During recent years he has devoted his attention largely to tuberculosis and the problems which tuberculosis involves; he has been active in the present movement of education which has spread over the country. Aside from his activity in general phases of the subject, he has inaugurated and is conducting the Ottawa Tent Colony, the first institution for the systematic, scientific treatment of tuberculosis in the Mississippi Valley. This, his private work, is being crowned with a degree of success which is most gratifying.

Gain—all men love gain—must be viewed as a basic element of progress. We live in a peculiar age, an age of commercialism.

THE REVIEWER'S TABLE

Books, Reprints, and Instruments for this department, should be sent to the Managing Editor, Century Building, St. Louis.

COSMETIC SURGERY. The Correction of Featural Imperfections. By Charles C. Miller, M.D. Including the description of a variety of operations for improving the appearance of the face. 136 pages. 78 illustrations. Chicago, Ill., 70 State street: Published by the Author. (Prepaid, $1.50.)

This practical little volume is made up of the collected contributions of Dr. Miller to various medical journals, a part having appeared in the Fortnightly. Cosmetic surgery is every day attracting more attention; its importance and possibilities are but lightly appreciated by the profession as a whole.

That it is to play a more important role is a certainty. The work being done by the author and the details of his technique make intensely interesting reading, the practical application each reader must make for himself.

ON THE WITNESS STAND. Essays on the Psychology of Crime. By Hugo Muensterberg, Professor of Psychology, Harvard University. New York: The McClure Co., 1908.

The development of psychology into a science is most interesting reading, that it has become a practical science, which can demonstrate its achievements and speaks authoritatively of its aims, we have a few earnest men to thank; none among American teachers has done more to bring this about than has the author of this book, Prof. Muensterburg. We who did rudimentary work in psychology in Western colleges twenty years ago find a richness in present day offerings to students which make us envious that we could not have had present-day opportunities. This book supplies some of the information which was not available at that remote day.

The subjects considered are: Illusions; The Memory of the Witness; The Detection of Crime; The Traces of Emotions; Untrue Confessions; Suggestions in Court; Hypnotism and Crime; The Prevention of Crime.

Each chapter is a masterpiece, and the work as a whole is one which must be of profound interest to physicians, whether they are especially concerned with the legal phases or not. The study of the mind in its aberrant journeyings is found to follow system quite as true as normal states and dependable laws can and are deduced therefrom. The development of this appears in this very entertaining and instructive volume which we can most heartily recommend to our readers.

ANATOMY, DESCRIPTIVE AND SURGICAL. By Henry Gray, F.R.S., late lecturer on Anatomy at St. George's Hospital, London. New American edition, enlarged and thoroughly revised, by J. Chalmers Da Costa, M. D., Professor of Surgery and Clinical Surgery, and Edward Anthony Spitzka, M D., Professor of Anatomy, in the Jefferson Medical College of Philadelphia. Imperial octavo, 1625, with 1149 large and elaborate engravings. Philadelphia and New York: Lea & Febiger, Publishers, 1908. (Price, with illustrations in colors, cloth, $6.00, net; leather, $7.00, net.)

Perhaps no department of medicine is, in

a literary sense, more richly supplied than Anatomy. As the student must begin with it and the practitioner must continue with it till the end, the demand is large, and nothing less could justify the great expense of creating a major work, with its requirement of immense illustration. Henry Gray, fifty years ago, evinced the boldness of his genius in producing an original work so novel and so far in advance in matter and method, both in text and engravings, that it leaped to the front and established itself as an institution, a unique position for a book. Generally it is easy to improve on a model, but "Gray" has proved the exception. It is the quality of genius to defy analysis and imitation. Gray manifested his genius both in text of inimitable didactic power and in a series of equally masterly illustrations. His invention of placing the names of parts directly on them was in itself a great one, and at once removed the former difficulties to toilsomely looking for them at the ends of lines, or, what is worse, finding merely reference letters explained somewhere else. It costs vastly more to cut the names on the body of an engraving, but it is worth while for the reader's sake, especially if he has to pay no more for the advantage,. That the concentration of demand would justify this was Henry Gray's bold forecast, and he was right. It brought about another advantage scarcely less important, namely, the possibility of frequent editions, a necessity in so progressive a subject. Here again the barrier of expense can only be crossed by a work able to subdivide it by unexampled sales. "Gray" proves all these qualifications at once by coming to seventeen editions in its first fifty years, and it now enters upon its second half-century stronger and better than ever. This new edition is the best of all the line. It has been thoroughly revised, every page bearing alteration and improvement, and the whole section on the Nerve System has been rewritten in conformity with recent revolutionary changes in methods of approaching and viewing it. Professor Spitzka, who has done this section, has made the subject a special field of study, and to the qualifications of an anatomist of the first rank he adds the skill of an artist as well, so that his own hand conveys his knowledge directly to the eye of his reader. Professor Da Costa is both an anatomist and surgeon and the editorial combination therefore unites what is required for the revision of a work on this subject. The use of colors is another valuable aid initiated by "Gray," and it is developed even further than before in this new edition.

The foregoing statement explains the reason for an observed fact, namely, that "Gray" reduces to minimum the labors of student and teachers, or, in other words, increases their efficiency to a maximum. This has been impartially tested by numbers of teachers independently, who, after using other works and finding more difficulty during sessions and less success in preparing men for college and State license examinations, have concluded that the consensus of opinion is right in placing "Gray" where it is —at the forefront.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared Original Articles on Treatment, Medicine, Surgery, etc. By leading members os the medical profession throughout the world. Edited by W. T. Longcope, M. D. Vol. II. Eighteenth series. Philadelphia: J. B. Lippincott, 1908.

The second volume of this eminent publication contains many interesting and useful contributions. The therapeutic section embraces articles on "Scarlet Fever" by Louis Fisher; "Treatment of Syphilis," by H. Hallopeau; "Bacterial Vaccines," by Edward Turton; "Serum Treatment of Bacillary Dysentery," by Vaillard and Dopter, and "Treatment of Hemoglobinuric Fever," William Dederick. The contributions comprising the medical section are written in a manner as to do credit to their respective writers. Perhaps the most noteworthy under this caption are the articles on "Pain as the Chief or Sole Expression of Psychic State," by Theodore Diller and "Some Curiosities of Lead Poisoning" by James Walsh. The chapter on surgery continues to merit the admiration established by its predecessors. Identified with this section are John Roberts, Charles Cumston, P. Lockhart Mummerg, and Argus Willmoth. Gynecology is represented by John Sampson, who writes on "Clinical Manifestations of Uterine Cancer;" Ernest Young, "Gonorrhea and Pregnancy;" and Louis Frank, "Pregnancy Complicated by Uterine Fibromata in a Hemiplegic."

The contributions embracing the special branches, ophthalmology, dermatology, orthopedics, pediatrics and pathology are represented by men well fitted for the task.

MODERN MEDICINE. Its Theory and Practice. In Original Contributions by American and Foreign Authors. Edited by William Osler, M. D., Regius Professor of Medicine in Oxford University, England, etc. Assisted by Thomas McCrea, M. D., Associate Professor of Medicine and Clinical Therapeutics in Johns Hopkins University, Baltimore. In seven octavo volumes of about 1,000 pages each; illustrated. Philadelphia and New York: Lea & Febiger, Publishers. (Price, per volume, cloth, $6.00, net.)

The fourth volume of this classical system is well in keeping, both quality and tone, with the preceding issues. Each chapter bears the distinction of individuality as well as originality. The first part of the book, embodies an elaborate and thoroughly up-to-date discussion of diseases

of the circulatory system. Charles Hoover, who writes two chapters, one on "General Considerations in Cardiovascular Disease," and another on "Functional Diseases of the Heart," shows remarkable good judgment in the presentation of these subjects. McPhedran writes a well balanced and absorbing chapter on "Diseases of the Pericardium," while the identification of Robert Babcock with "Diseases of the Myocardium" needs no further comments, as the latter's works are too well known. The name of Wm Osler in connection with chapters on "Acute Endocarditis," "Diseases of the Arteries" and "Aneurism" sufficiently guarantee their merits. "Hypertrophy, Insufficiency and Dilatation of the Heart" comprising two splendid chapters emanates from the pen of Alexander Gibson, while Osler and the latter author jointly contribute to the chapter on "Diseases of the Valves of the Heart." The chapters on "Congenital Cardiac Disease;" Thrombosis, Embolism, Phlebitis;" and "Diseases of the Lymphatic Vessels" written respectively by Maude Abbott, George Blumer and Aldred Warthin are well in keeping with the general tone of the volume. Part two embraces a timely consideration of "Diseases of the Blood." Over one hundred pages, fully illustrated, are given to a discussion of the "General Pathology of the Blood-Forming Organs;" "Pernicious and Secondary Anemia, Chlorosis, and Leukemia;" "Purpura and Hemophilis." Suffice it to say that the well-known authors, Richard Cabot and Joseph Pratt are the contributors. Diseases of the spleen, thymus and lymphatic glands, which constitutes part 3, are respectively represented by Irving Lyon, and Aldred Warthin. These chapters are all that could be desired as far as high standard and merit are concerned. Illustrations are used throughout to elucidate the text.

Dr. D. S. Booth, of this city, lately returned from a trip to Palestine, Tex., where he was the guest of the Eleventh District Medical Society. In connection with the meeting he delivered a lecture on "The Elixir of Life" before a general audience. The lecture dwelt on the achievements and aims of legitimate medicine.

The St. Louis Medical Society resumed scientific work after the summer's recess on September 19th. The continued warm weather makes it difficult to realize that the vacation period is not still with us, but interesting work has been arranged for and it is hoped to make the closing months of the year quite as profitable as were those of the winter and spring session.

CORRESPONDENCE

ORTHOPEDIC SURGERY IN GERMANY.

Germany—Berlin.

The principal centres in Germany for orthopedic work and study are in Berlin and Munich. Orthopedics as a whole has been somewhat disorganized since the death of Hoffa. The general surgeons have been attempting to bring this specialty back to their department and have brought pressure to bear upon the government in this direction. At the last Congress of Orthopedic Surgeons, in Berlin, in April, the usefulness of this branch of surgery was fully demonstrated to the government, whose representatives were present. If for no other reason, the care of the cripples, the useful and self-supporting citizens into which they are turned, deserves the support of the government.

Pending the appointment of a successor to Hoffa, the orthopedic cases have, in Berlin, been divided between the surgical clinic at the Charité and the Ziegelstrasse clinic of Bier. The latter receives the larger number of cases, and is the more important. It is under Prof. Klapp and in charge of Dr. J. Fraenkel, a former assistant of Hoffa. A distinct orthopedic clinic is here established with a daily attendance of about 50 cases. Here also is the scoliosis clinic of Klapp, where the now famous Klapp creeping method is applied. About 100 children are here treated.

Another feature of this policlinic is the Bier hyperemic clinic. No American should leave Berlin without having visited this latter department. No amount of reading on this method will give one so good an idea as a personal visit and talk with the assistants, who are always willing to explain. These three departments offer a wonderful opportunity for the treatment of orthopedic cases. In the general surgical clinic Prof. Klapp has introduced a new method in the treatment of phlegmons of the hand and fingers. This consists, in the finger, in making bilateral incisions in each phalanx and opening the tendon sheaths. Very good results are obtained. Good results are likewise obtained by the hyperemic and vacuum treatment in tubercular joints. A combination of hyperemic and immobilization treatment in tuberculous ankles, knees and wrists proves of wonderful efficacy. As with all enthusiasts, this hyperemic treatment is here carried too far. A tight band is applied to the neck for mastoiditis, to the penis for gonorrhea. No attempt is made to treat the hip joint in this manner. The vacuum treatment for mastitis as here applied does give very good results.

Nothing special is here observed in the treatment of tubercular spondylitis (Pott's disease), except the improved method of making-the "gips-bett" of Lorenz. In hip disease the limb is immobilized and the patient is allowed to walk without weight-bearing. This is also carried out in the knee and ankle. In reduction of congenital dislocation of the hip a combination of the Lorenz and Hoffa methods is used. Another large orthopedic clinic is that of Prof. Joachimsthal on Luisen strasse. The methods and apparatus employed here are virtually the same as at Ziegelstrasse Prof. Joachimsthal is in personal attendance daily. He is a very amiable individual and will show the visitor a good series of interesting cases.

For those not speaking German a good clinic to visit is that of Dr. Böhm, a former assistant of Hoffa. He was likewise a former assistant of Goldthwait in Boston, and speaks a fluent English. This clinic, though not very large, is rapidly growing, and one can here see the application of the methods of Hoffa. Dr. Böhm is likewise in charge of the mechano-therapeutic department of the university, where interesting work can be seen.

These three clinics are so arranged that the visitor can see each one daily.

MUNICH.

The observance of orthopedic work is here limited to the two clinics of Prof. Lange, one at the Surgical Hospital with a small number of beds, the other at the Rothes Krewz Hospital with about 200 beds. The main interest here of course the tendon transplantation and lengthening for which Lange is renowned. Scoliosis is treated by gymnastics and passive methods. Club-foot is corrected by manipulation. Bow- and knock-knees by apparatus. If this fails, by osteotomies. The ordinary treatment for hip and Pott's disease. A good celluloid plate for flatfoot is here employed. Most of the apparatus here used is of celluloid, which is lighter than and just as efficacious as plaster or leather.

Prof. Lange has been called to Berlin, but has declined the offer.

ALEXANDER E. HORWITZ, A. M., M. D.

NOTE.—Since writing the above, Prof. Joachimsthal has been called to fill the chair of orthopedics at the university, which will open one more large orthopedic clinic.

A. E. H.

A single, brief, original expression of a subject frequently leaves a permanent impression of value.

SOCIETY PROCEEDINGS

MEDICAL ASSOCIATION OF THE SOUTH-WEST.

The third annual meeting of this association will be held in Kansas City, October 19, 20, 21, under the presidency of Dr. Thos. E. Holland, of Hot Springs, Ark.

The program just issued, shows a feast of good things in scientific mood, as well as a full measure of social entertainment for those who attend. Following is the arrangement:

Monday, October 19, a.m., clinics at the various hospitals and colleges. Monday afternoon will be given up to the preliminary work of the society.

DR. THOS. E. HOLLAND.

Monday evening a dinner and banquet at the Coates House will be tendered the ladies, to which the gentlemen are invited.

Tuesday, October 20, scientific sessions both morning and afternoon.

In the afternoon, the ladies, under the direction of Dr. F. B. Tiffany, will be given an automobile ride through the beautiful parks and boulevards and over the famous cliff drive, stopping for "tea" at the country club and returning to the Coates House about 6 p. m.

Tuesday evening a smoker will be tendered the physicians by the profession of Kansas City at the Coates.

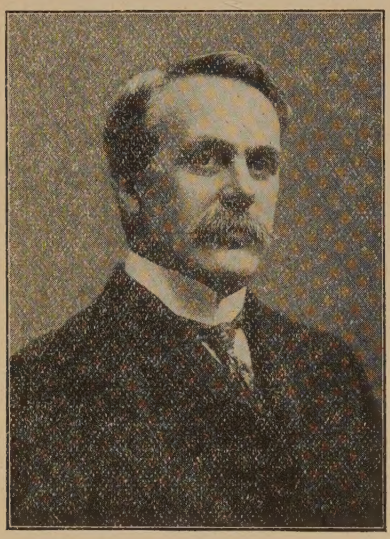
Wednesday, October 21, will be given up entirely to the scientific session and the election of officers.

Thursday, Friday and Saturday preparations are being made to have some very inter-

esting clinics held at the various hospitals and colleges. The Coates House has been chosen as headquarters. Come, bring the ladies, and make your reservations for the entire week.

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

The annual meeting of this society was held in Council Bluffs, Iowa, September 3 and 4, with an attendance of about one hundred and twenty-five. An excellent program of twenty papers was disposed of in the two days, including one evening session. The address in Medicine, by Dr. C. B. Hardin,



DR. C. B. HARDIN.

of Kansas City, was a comprehensive and masterly review of the subject of Arteriosclerosis, and was well received.

Dr. A. R. Kieffer gave an entertaining and instructive lecture on the Diagnosis of Ectopic Pregnancy, that was full of useful hints to the general practitioner in the early recognition of this condition.

The society was entertained at the Elks Club by a smoker and Dutch lunch.

The election of officers resulted as follows:

President, Dr. C. B. Hardin, Kansas City.

First Vice-President, Dr. A. B. Somers, Omaha.

Second Vice-President, Dr. J. M. Bell, St. Joseph.

Treasurer, Dr. T. B. Lacey, Jr., Council Bluffs.

Secretary, Dr. Chas. Wood Fassett, St. Joseph.

Next meeting in March 18, 19, 1909, at St. eph.

BYRON ROBINSON'S NOTE BOOK.

An autopsy is not a dissection. It is the gross open book recording the gross cause of death.

The most indellible impression, the most useful knowledge is that which the student secures at systematically conducted autopsies.

Hysteropexy is an irrational operation which may be followed by harmful consequence. It should not be performed on reproductive woman—and others do not require it.

I have witnessed hundreds of autopsies in which splanchnoptosia was pronounced, but could never detect ureteral flexion from nephroptosi. It appears that it requires more than nephroptosia to cause pathologic flexion, resulting in hydro-ureter. The real cause of periodic hydro-ureter is cellular or peritoneal adhesions—cicatrices. In nephroptosia the gliding of the distal pole of the kidney along the external border of the psoas muscle aids to prevent ureteral flexion, during nephroptosia.

The "good old times" 7000 years ago seemed as bad to the "good old timers" as the present times seem to the modern man, as shown by the following translation of an inscription on a tablet in the Imperial Museum at Constantinople, Turkey: *Naram Sin—5000 B. C.* We have fallen upon evil times, the world has waxed old and wicked. Politics are very corrupt. Children are no longer respectful to their elders. Each man wants to make himself conspicuous and write a book."

We owe much to Guttenberg the inventor of printing.

In an old bookstore I bought for 35 cents a book of 820 pages, called "Scientific and Literary Treasure." It was written in 1866 by Samuel Maunder. The frontispiece contains steel engravings of Homer, Socrates, Hippocrates, Aristotle, Cicero orating in the Senate, Shakespeare talking to Queen Elizabeth and so forth—all of which typified Maunder's idea of "scientific treasure,"; Maunder's great idea is manifest when it is observed that Guttenberg, the inventor of printing is placed as the central maximum figure of the frontispiece.

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THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scentific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

Advertising forms close on the first and fifteenth of each month. Time should be allowed to submit proof for correction. Advertising rates on application.

Remittances and business communications should be addressed to the Fortnightly Press Co.

Subscription, $2.00 a year, in advance, including postage to any part of the United States, Mexico and Canada. Postage to foreign countries in the Universal Postal Union, including Newfoundland, $1.00 a year additional. Entered at the St. Joseph postoffice as second-class matter.

Subscriptions may begin at any time; volumes end with June and December.

Contributors should understand that corrected typewritten copy is essential to clean proof and prompt publication, and is much more satisfactory than manuscript. Original articles should be as condensed as justice to the subject will allow.

Editorial offices in St. Louis and St. Joseph, where specimen copies may be obtained, and subscriptions will be received.

Contributions and books for review should be addressed to the Managing Editor, 319 and 320 Century Building, St. Louis, Mo.

CLINICAL THERAPEUTICS

A forum of original experience, to which scientific contributions are invited. Responsibility for views promulgated imite (tc auor.

Contributions to the Heart Tonics.—(By Dr. G. S. Haynes, Pharmacological Institute of the University of Cambridge.)—The galencial preparations of digitalis and strophanthus vary considerably in their action and continuously undergo changes. It must therefore be regarded as a decided advantage that such uniform chemical bodies as digitoxin and strophantin have been placed upon the market. Even minute doses of strophanthin (0.000001 grams) will show a pronounced action upon the isolated rabbit heart transfused with Ringer-Locke's solution. After intravenous injection, strophanthin will act almost immediately. Most heart tonics give rise to a peripheral contraction of the vessels which must be kept in mind in case of arterial disease and rise of blood pressure. Where digitalis is indicated, but a dilatation of the vessels is desired (as in dilatation of the heart) the drug is preferably combined with purin derivatives (caffein, theobromin, theophyllin). The most satisfactory member of this group is diuretin (theobromin-sodium and sodium salicylate). It strengthens the apex beat, similar to caffeine. The coronary vessels will dilate considerably if the isolated rabbit heart be transfused with Ringer-Locke's solution containing diuretin. By combining a heart tonic with a vasodilator such as diuretin, the heart beat will become slower and stronger and the blood will pass more freely through the arteries. The action of heart tonics upon the vagus is partly overcome by the vasomotor action of diuretin. Diuretin at the same time acts as heart stimulant. Since it renders the pulse stronger and at the same time dilates the coronary vessels it is indicated in combination with digitalis since the greatest disadvantage of the latter drug in the treatment of heart disease is the vaso-constriction which it inducdes. Besides dilating the coronary vessels, diuretin will also widen the peripheral arteries, but the blood-pressure will fall below normal since the heart is more active. The large amount of urine passed after giving diuretin is always secondary to the larger amounts of blood which the kidneys receive. A primary, specific action of diuretin upon the renal epithelium has never been discovered. The combination of digitalis with diuretin is particularly promising in cases of cardiac hydrops, heart weakness and in affection of the coronary vessels. A cumulative action is seen particularly with digitalis and scilla, less so with strophanthus. A cumulative action is hardly to be feared after the intravenous use of strophanthin.—Folia Therapeutica, October, 1907.

THE crusade against weeds has begun again after the weeds have been an unsightly growth all summer and have already gone to seed and scattered the promise of more weeds next year all over the city. The time to cut weeds is when they are young and before they go to seed.

COMING MEDICAL MEETINGS.

National Meetings

International Congress on Tuberculosis, Washington, D. C., September 21 to October 12.

Mississippi Valley Medical Association, Louisville, Ky., October 13-15, 1908.

Medical Association of the Southwest, Kansas City, Mo., October 19-21, 1908.

State Meetings

Colorado, Denver, October, 1908.
Idaho, Boise, October 8-9, 1908.
Kentucky, Winchester, October.
Minnesota, St. Paul, October.
Nevada, Goldfield, October 6-7